

Permit Amendment Source Analysis & Technical Review

Company	Building Materials Investment Corporation	Permit Number	7711A
City	Dallas	Project Number	282350
County	Dallas	Regulated Entity Number	RN100788959
Project Type	Amend	Customer Reference Number	CN605251487
Project Reviewer	Steven Stump		
Site Name	Asphalt Roofing Materials Manufacturing Facility		

Project Overview

Building Materials Investment Corporation requested an amendment of their permit which authorizes an asphalt roofing production facility. With this amendment, the company requests to remove one of the existing blowstills (Facility Identification Number [FIN]: 26) with a new blowstill. The new blowstill functions in a similar manner as the existing blowstill. Although, the new blowstill will use a slightly larger vessel compared to the existing blowstill, there will be no change in actual asphalt throughput, asphalt blow loss or asphalt production rate. Therefore, there will be no change to the actual or potential emissions or the character of emissions as a result of the proposed replacement project. In addition, there will be no change to the method of emission control.

Public Notice Information - 30 TAC Chapter 39 Rules

Rule Citation	Requirement	
39.403	Is Public Notice Required?	No
	If no, give reason:	There are no increases in allowable emissions that exceed significant or de minimis public notice thresholds, no new contaminants, and no change in character of emissions.

Construction Permit & Amendment Requirements - 30 TAC Chapter 116 Rules

Rule Citation	Requirement	
116.111(a)(2)(G)	Is the facility expected to perform as represented in the application?	Yes
116.111(a)(2)(A)(i)	Are emissions from this facility expected to comply with all TCEQ air quality Rules & Regulations, and the intent of the Texas Clean Air Act?	Yes
116.111(a)(2)(B)	Emissions will be measured using the following method:	Recordkeeping
	Comments on emission verification:	Records are required to indicate proper operation of control equipment, throughputs, and production rates.
116.111(a)(2)(D)	Subject to NSPS? Subparts A, Dc, & UU	Yes
116.111(a)(2)(E)	Subject to NESHAP?	No, the site does not emit any air contaminants regulated under 40 CFR Part 61.
116.111(a)(2)(F)	Subject to NESHAP (MACT) for source categories? Subparts A & AAAAAAA	Yes
116.111(a)(2)(H)	Nonattainment review applicability: This site does not emit 100 tons or more per year of NOx or VOC. Therefore, nonattainment review is not applicable.	
116.111(a)(2)(I)	PSD review applicability: The facility is not a named source nor does it have the potential to emit greater than 250 tons per year of any pollutant. Therefore, PSD review is not applicable.	

Permit Amendment Source Analysis & Technical Review

Permit Number: 7711A
Page 2

Regulated Entity No. RN100788959

116.111(a)(2)(L)	Is Mass Emissions Cap and Trade applicable to the new or modified facilities?	No
	If yes, did the proposed facility, group of facilities, or account obtain allowances to operate:	No
116.140 - 141	Permit Fee: \$5683.00	Fee certification: M817366

Title V Applicability - 30 TAC Chapter 122 Rules

Rule Citation	Requirement
122.10(13)	Title V applicability: Yes, this facility operates under O-2771.
122.602	Periodic Monitoring (PM) applicability: The company is required to monitor temperature of the incinerator with an averaging period of one hour, and to monitor visible emissions once per week of blowing stills, of storage tanks, and of mineral handling and storage facilities.
122.604	Compliance Assurance Monitoring (CAM) applicability: CAM applies to both the Thermal Oxidizer (direct-flame incinerator) (EPN 8/8A) and the Coalescing Filter Mist Elimination Systems (EPN CFL/34). CAM is achieved through following NESHAP (MACT) AAAAAAA requirements. Temperature monitoring for the Thermal Oxidizer as required by the MACT is required by Special Condition 28 at a 1 hour interval as opposed to the 3 hours interval specified in AAAAAAA. The Coalescing Filter Mist Elimination System is required to follow the operating range as specified in 40 Code of Federal Regulations (40 CFR) § 63.11562(a)(2) and (b)(3). The 3-hour average pressure drop across the device is required to fall within the approved operating range established as specified in 40 CFR § 63.11562(a)(2) and (b)(3).

Process/Project Description

The plant manufactures asphalt shingles for the roofing industry. A dry, nonwoven fiberglass mat is fed into the roofing machine from an unwind stand. The fiberglass is carried through the coating section where coating asphalt mixed with a stabilizer (limestone) is applied to both surfaces of the mat. The coating operation is followed by the surfacing section. Ceramic colored granules are blended and dropped in proper sequence onto the coated web and embedded. The back surface of the sheet is sprinkled with sand to prevent it from adhering to rolls and itself in the finished package. The hot sheet, with a mineralized surface, then goes into the cooling section of the machine. Cooling is accomplished by passing the web over a series of water-cooled drums, through water mist sprays, and between air jets. It is then accumulated in the looper section of the machine to provide surge capacity required prior to cutting. Self-seal striping dots are then applied and the sheet is cut into shingles and automatically packaged. The boiler accepts the thermal oxidizer exhaust gas for preheating recovery and fires as necessary to meet the steam needs of the plant.

Pollution Prevention, Sources, Controls and BACT- [30 TAC 116.111(a)(2)(C)]

Emissions at the facility are produced by two heaters, the boiler and the standby boiler, all storage and process tanks, blowing stills, and all truck and railcar loading and unloading operations.

The Standby Boiler (EPN BLR5) is rated at 19 Million British Thermal units/hour (MMBtu/hr) and is equipped with a low NOx burner (with a manufacturer represented 30 parts per million rating).

Emissions from the blowing stills, loading racks, and storage tanks vent to a thermal oxidizer (direct-flame incinerator). The thermal incinerator has a rated destruction efficiency of 95% for PM/PM10, H2S, CO, and VOC.

Emissions from stabilizer storage, stabilizer heaters, the line 1 stabilizer use bin, and sand application are vented to baghouses. Emissions from the line 1 surfacing section are vented to dust collectors. These control units have a rated capture efficiency of at least 99%.

No abatement device or method was listed for capture and reduction of SO2 from the listed facilities at the site. The

Permit Amendment Source Analysis & Technical Review

Permit Number: 7711A
Page 3

Regulated Entity No. RN100788959

controls are economically reasonable and technically practicable considering the age of the facility and the impact of its emissions on the surrounding area.

Emissions from planned startup and shutdown activities are authorized by this permit from an amendment approved in June 2013. Maintenance activities are authorized either under Permit by Rule or claimed under 30 Texas Administrative Code § 116.119, De Minimis Facilities or Sources. Startup and shutdown emissions are virtually indistinguishable from production emissions. Although there may be minor emissions associated with startup and shutdown, emission factors used to quantify production emissions are considered to have enough conservatism to include any incidental increases that may be attributed to startup and shutdown. In addition, emissions from planned startup and shutdown of combustion units should not result in any quantifiable hourly emissions change for products of combustion. Although there may be transitional and incidental spikes before units stabilize during startups (5 to 15 minutes), overall products of combustion are expected to be within hourly range limits for normal loads during production operations.

Permit Concurrence and Related Authorization Actions

Is the applicant in agreement with special conditions?	Yes
Company representative(s):	Ms. Latha Kambham, Trinity Consultants
Contacted Via:	e-mail
Date of contact:	March 27, 2018



Project Reviewer
Steven Stump

4-11-2018
Date



Team Leader
Joel Stanford for Bonnie Evridge

04/16/18
Date